Operational Assessment of the Global Hawk System

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Critical Operational Issues

- **COI-1: Does the GH UAV system provide the combatant commander timely, accurate, and complete reconnaissance, surveillance, and target acquisition (RSTA) information?**

- **COI-2: Is the GH system UAV interoperable with C4I architectures and operations necessary to perform the RSTA mission?**

- **COI-3: Does the GH System meet the warfighter's sustained combat requirements?**

FY 04 OA Focus Areas

- Identify and assess major impacts affecting potential operational effectiveness and suitability
- Identify any programmatic voids that would adversely impact the ability of the system to meet operational requirements
- Assess program documentation and testability of user requirements
- Assess the ability of the program to support OT&E
- Assess special field activities requested by higher headquarters or decision makers

OA Objectives

- **Assess mission level performance via combined DT/OT and dedicated OA sorties**
- **Data collection will focus on:**
  - **ORD requirements, paying particular attention to the KPPs**
  - **Ability to support the warfighter using different ISR missions**
  - **System maturity and readiness for OT&E**
  - **Document deficiencies (DR's) / fixes**

OA Configuration Requirement

- **Two production representative 2000 lb payload A/C (P-1 & P-2)**
  - Full sensor suite (EO / IR / SAR / SAR-GMTI)
  - SW version 8.2
- **One production representative ground system (MCE/LRE)**
  - SW version 6.0
    - Manual collection manager
    - Automatic contingency generator
- **Qualified AF operators**
- **AF / contractor maintainers**
- **Red-line technical orders**
- **CAMS data**

Stabilized Performance

- **No Cat 1 DRs**
- **All Cat 2 DRs have a disposition**
- **At least two to three months of normal operations with production SW/HW (two sorties per week)**
  - 24 hours of flight time per week
  - Edwards / Beale AFB

Combined DT/OT Phase

- **Missions need to consist of:**
  - At least a SAR
  - Connected to the DCGS at Reno through the GHEN
  - Trained operators blue-suit preferred
  - Tasking from a Collection Manager (can be a test team member)
  - Flights will be at least 8 hours over R2508 with pre-planned and ad hoc taskings
  - Images will be exploited and NIIRS rated by 152 ANG
  - Operations from Edwards AFB

ISE Phase

- **Three ISE missions flown from Beale or Edwards**
  - Stabilized performance missions 24 hours in length
    - Two flown in Edwards area
    - One flown to Cold Lake in Canada
  - One mission planning timeline check
  - Full sensor suite
  - Trained blue-suit operators and maintainers (contractor assistance with maintenance)
  - Dissemination to DCGS at Reno, a DCGS-N, and an Army TES
  - Preplanned and ad hoc tasking from a Collection Manager (can be a test team member)
  - Images will be exploited and NIIRS rated by IESs

OA Phase

- **Four weeks of normal operations (2 sorties per week) with dissemination to 152 ANG DCGS, (an army organization, a navy organization, and a marine organization)**
  - **Multi-service exercise with stressed operations (minimum turn time)**
  - At least 12 hour missions and two 28 hour missions
  - Full sensor suite
  - One mission planning check
  - Trained AF operators
  - Maintenance (Contractor or AF maintainers)
  - Preplanned and ad hoc tasking from a Collection Manager (can be a test team member)
  - Images will be exploited and NIIRS rated by IESs

OA Scenarios

- **Four weeks of normal operations with communications with different IESs**
  - Pre-coordinated target deck
  - Retasking
  - Two 28 hour sorties
- **Multi-service exercise with stressed operations (minimum turn time)**
  - 24 hour missions
  - Tasking from a AOC CM, both preplanned and ad hoc
  - Dissemination to 152 ANG DCGS for exploitation and NIIRS rating

OA Limitations/Issues

	Delivery as of 10-31-03	Delivery as of 12-15-03	Delivery as of 1-15-04	Delivery as of 2-15-04	Delivery as of 3-15-04
P1	25 Mar 04	8 Jul 04			
S1	1 Jan 04	1 Mar 04			
ERU 6	1 Nov 04	1 Mar 04			
SAR delivered w AIP	1 Feb 04	7 Mar 04			
IMMC 8.2	1 Feb 04	1 Feb 04			
MCM	1 Dec 03	7 Mar 04			
ACG	1 Feb 04	29 Feb 04			
P2	2 APR 04	15 Jul 04			
S3 (Originally S1)	15 Mar 04	15 Jun 04			
ERU 3	15 Mar 04	15 Jun 04			
LRE 1					
SW 6.0	1 Feb 04	1 Feb 04			
MCE					
SW 6.0	1 Feb 04	1 Feb 04			

Back up Slides

Resource Requirements

- Operational control of assets rests with ACC or AFMC
  - P-1 & P-2
  - AF MCE / AF LRE
  - Mission planning stations
- ACC will assist with mission execution and data collection
  - CAMS-like data for suitability assessment
  - Require 8 to 10 pilots for stressed operations
  - Require 4 sensor operators
- Test team facilities with classified storage

Objectives

- **Objective 1-2: Evaluate the ability of the GH System to support RSTA collection.**
- **Objective 1-1: Evaluate the ability of the GH System to support RSTA tasking.**
- **Objective 1-3: Evaluate the ability of the GH System to support RSTA Exploitation.**
- **Objective 1-4: Evaluate the ability of the GH System to support RSTA dissemination.**
- **Objective 1-5: Evaluate the usefulness of GH System's products to the war fighter.**

OI Assessment Areas

- **OIA 1. Assess whether the GH System increases the combatant commander’s ability to wage war**
- **OIA 2. Assess the GH System’s communications and logistics requirements to support employment**
- **OIA 3. Assess the GH System’s ISR data impact on the theater's C4ISR operations**
- **OIA 4. Assess the GH System’s ability to interoperate with Air Force and Joint Forces**
- **OIA 5. Assess the GH System’s ability to survive in a theater war environment**

OA Limitations/Issues

- **Degree of production representative (2000 lb payload) system(s)**
  - Aircraft / sensor(s) / ground system
- **Availability of assets due to real-world events**
- **Lack trained AF maintenance personnel at Beale**
- **Limited reliability, maintainability, and availability (RMA) criteria**
  - No quantitative maintainability criteria
- **Technical orders**
- **DT/OT test time**